

## CLAIMS

1. A susceptor in which a semiconductor substrate is supported approximately horizontally in a pocket when performing a vapor phase growth of a single crystal thin film on a front surface of the semiconductor substrate, and in which the pocket comprises an outer peripheral pocket portion to support the semiconductor substrate and a central side pocket portion which is formed inside the outer peripheral side pocket portion to be concave from the outer peripheral side pocket portion,

wherein the outer peripheral side pocket portion comprises a substrate supporting surface which is inclined with respect to a horizontal surface to be lowered toward a central side from an outer peripheral side of the pocket, and a region of the substrate supporting surface excluding at least an inner peripheral edge supports a portion of a rear surface of the semiconductor substrate which is inside an outer peripheral edge of the semiconductor substrate.

2. The susceptor of claim 1, wherein the pocket is for a silicon single crystal substrate of 300mm in diameter, and the substrate supporting surface is inclined at an angle of more than 0 degree and not more than 1 degree with respect to the horizontal surface.

3. The susceptor of claim 1 or 2, wherein the

substrate supporting surface is inclined with respect to the horizontal surface at an angle equal to an angle which is made by the horizontal surface and a tangent to the semiconductor substrate at a contact of the substrate supporting surface and the semiconductor substrate in an imaginary plane including an central axis of the pocket.

4. The susceptor of any one of claims 1 to 3, wherein the central side pocket portion is concave to have a depth so as not to contact a rear surface of the semiconductor substrate.

5. A vapor phase growth apparatus comprising:  
the susceptor of any one of claims 1 to 4.